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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,905	06/24/2003	James A. Hoff	1104-750/ RKE-075	2171

7590 03/08/2005

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EXAMINER	
SMALLEY, JAMES N	
ART UNIT	**PAPER NUMBER**
3727	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/602,905	HOFF, JAMES A.
	Examiner	Art Unit
	James N Smalley	3727

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-28 is/are pending in the application.

4a) Of the above claim(s) 28 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-27 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 25 September 2003.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-27, drawn to the apparatus of a closing plug, classified in class 220, subclass 304.

II. Claim 28, drawn to the method of fabricating a closure plug, classified in class 264, subclass 339.

The inventions are distinct, each from the other because of the following reasons:

Inventions (I) and (II) are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product of claim 1 can be molded with the protrusions extending from an outer portion of the radial flange.

2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

3. Because these inventions are distinct for the reasons given above and the search required for Group (I) is not required for Group (II), restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn

process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

6. During a telephone conversation with James Durlacher on 24 February 2005 a provisional election was made without traverse to prosecute the invention of group (I), claims 1-27. Affirmation of this election must be made by applicant in replying to this Office action. Claim 28 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 8, 10-12, 22 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Bradshaw et al. US 4,105,135.

Bradshaw '135 teaches a closure plug (1) comprising a threaded body for receipt by a threaded flange (10), a radial flange (6), and a plurality of unitary axially-protruding projections (8) from an outer portion of the flange.

Regarding claim 1, the axially-protruding projections/scallops (8) of Bradshaw '135 are capable of being used in the intended manner, i.e. as abutments for limiting the threaded advancement of the plug by abutment against an abutment surface. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claim 11, Examiner reads the lower surface (6a) of the flange as the abutment means for limiting the threaded advancement of the plug into the threaded flange. See col. 3, lines 1-7.

9. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Johanson US 6,065,627.

Johanson '627 teaches a threaded flange (40), a closing plug (10) having a threaded body and radial flange (20), a sealing gasket (30), and abutment means (34) for limiting the threaded advancement of the closing plug into the threaded flange.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 2-4, 18-20, and 23-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Bradshaw et al. US 4,105,135.

Bradshaw '135 does not teach the radial flange having a modified hex-shape, or further having six projections. However, Bradshaw '135 does teach in col. 1, lines 38-42, the downwardly deformed scallops (8) are provided as actuating surfaces for the application of torque by hand engagement.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure of Bradshaw '135, providing six projections, motivated by the benefit of increasing the number of points whereby a hand may engage the plug to provide opening torque.

Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The decision notes, "Combination cannot be patented unless it is synergistic, that is, results in effect greater than sum of several effects taken separately." In the instant case, adding a sixth scallop to Bradshaw '135 will not synergistically increase the benefit afforded by the scallops. In other words, adding a sixth flange will not provide an increased torque-generating benefit greater than the sum afforded by each scallop.

12. Claims 5-6, 9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradshaw et al. US 4,105,135 in view of Hammer US 1,574,085.

Bradshaw '135 does not teach the axially-protruding projections/scallops having a flat bottom surface. However, Bradshaw '135 teaches means for limiting the threaded advancement of the plug comprising the abutment of flange undersurface (6a) with flange bead (18). Examiner holds this as the basis for a *prima facie* case of obviousness.

Hammer '085 teaches extensions (8) having a flat bottom surface (9). On page 2 of the Specification, first column, lines 3-7, the cap can be turned until the stop engages the container projection or thread.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cap of Bradshaw '135, providing the axially-protruding projections/scallops with a flat bottom surface for limiting the threaded advancement of the plug, as taught by Hammer '085, because the modification amounts to a change in the location of the abutment means, and is well within ordinary skill.

13. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradshaw et al. US 4,105,135 in view of Johanson US 6,056,627.

Bradshaw '135 does not teach the projections contacting an abutment surface after the plug is tightened into threaded engagement with the flange to a desired torque. However, the structure of Bradshaw '135 is capable of being used in the intended manner. For examiner, by applying the plug of Bradshaw '135 to a threaded flange such as that of Johanson '627, the axial projections would make contact with an abutment surface and limit the threaded advancement of the plug. This function is shown in Johanson '627, as flange ring (34) contacts sealing surface (48) and inherently limits the advancement of the plug.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the plug of Bradshaw '135 to a threaded flange, such as that of Johanson '627, motivated by the benefit of sealing the container and preventing leakage of the container contents during shipping.

Regarding claims 14-15, Bradshaw '135 does not teach the radial flange having a modified hex-shape, or further having six projections. However, Bradshaw '135 does teach in col. 1, lines 38-42, the downwardly deformed scallops (8) are provided as actuating surfaces for the application of torque by hand engagement.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure of Bradshaw '135, providing six projections, motivated by the benefit of increasing the number of points whereby a hand may engage the plug to provide opening torque.

Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The decision notes,

"Combination cannot be patented unless it is synergistic, that is, results in effect greater than sum of several effects taken separately." In the instant case, adding a sixth scallop to Bradshaw '135 will not synergistically increase the benefit afforded by the scallops. In other words, adding a sixth flange will not provide an increased torque-generating benefit greater than the sum afforded by each scallop.

14. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bradshaw et al. US 4,105,135 in view of Johanson US 6,056,627 as applied above to claim 16, and in further view of Hammer US 1,574,085.

Bradshaw '135 does not teach the axially-protruding projections/scallops having a flat bottom surface. However, Bradshaw '135 teaches means for limiting the threaded advancement of the plug comprising the abutment of flange undersurface (6a) with flange bead (18). Examiner holds this as the basis for a *prima facie* case of obviousness.

Hammer '085 teaches extensions (8) having a flat bottom surface (9). On page 2 of the Specification, first column, lines 3-7, the cap can be turned until the stop engages the container projection or thread.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cap of Bradshaw '135, providing the axially-protruding projections/scallops with a flat bottom surface for limiting the threaded advancement of the plug, as taught by Hammer '085, because the modification amounts to a change in the location of the abutment means, and is well within ordinary skill.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 6,726,048	US 5,211,304
US 5,320,237	US 1,526,375

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James N Smalley whose telephone number is (571) 272-4547. The examiner can normally be reached on M-Th 9-6:30, Alternate Fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lee Young can be reached on (571) 272-4549. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jns

[illegible] J. NEWHOUSE
PRIMARY EXAMINER
3/7/05